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Rural Electrification administration • U. S. DEPARTMENT OF AGRICULTURE





LIGHTS FOR CHRISTMAS . . . Page 5



A Message from the ADMINISTRATOR

President Kennedy has signed into law the first amendment to the original telephone legislation. The amendment was introduced by the same Congressmen who had been chief sponsors of the 1949 law, Representative Poage of Texas and Senator Hill of Alabama.

The amendment defines "telephone service" to include facilities for visual as well as audio communications — specifically, transmission of voice, sounds, signals, pictures, writing, or signs of all kinds. The original law limited REA financing to facilities where voice communcation was the principal intended use.

The need for the amendment became apparent when several telephone borrowers sought REA financing of facilities needed to bring educational television programs to school systems within their service areas. The Poage-Hill amendment permits REA to finance such services.

Rural people are indebted to Congress and the President for their recognition of the need for updating the definition of telephone service so as to enable REA-financed systems to furnish all the services which modern telephone systems are being called upon, and are expected, to provide. All segments of the telephone industry united in support of this legislation.

I am sure that REA telephone borrowers will welcome the opportunity to demonstrate their readiness and ability to meet all demands from their areas for telephone service under the expanded terms of the new definition.

Rural Lines

Vouse auto Lag

Editor: Samuel Levenson

Contributors to this issue: Donald Cooper, Lucile M. Holmes, Bernard Krug

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HOW SYSTEMS CAN PREPARE FOR NATIONAL EMERGENCY

REA electric borrowers have the opportunity to cooperate with a Government agency charged with the responsibility of protecting the Nation's power supply, in the event of a national emergency.

The agency—Defense Electric Power Administration—comes under the Department of Interior; specifically it is under the jurisdiction of Ken Holum, Assistant Secretary of the Interior for Water and Power.

"Rural electric cooperatives represent a very important part of the Nation's power industry," says DEPA Administrator Leslie N. Jochimsen. "More than 150 of them are cooperating with DEPA now, but we should like to increase that number.

"We all hope that we will never be faced with a national emergency," adds Jochimsen, "but preparedness is the key to survival. Part of preparedness is provision for an adequate power supply to meet essential requirements."

"Without electricity almost every vital activity would come to a halt. Our water and sewage systems, heating, refrigeration, industrial production, and the production of food and fiber—all largely depend upon electric power. All parts of the power industry share the responsibility—but only persons engaged in the daily operation of electric systems are qualified to do the job."

Voicing much the same thoughts, REA recently sent a memorandum to all REA electric borrowers, urging them to "cooperate to the fullest possible extent with DEPA." It pointed out that DEPA's assistance can be of special significance to REA powertype borrowers.

DEPA is an emergency organization, geared to swing into full operation on short notice.

All segments of the electric industry have been invited to participate—Government-owned, cooperative, investorowned or industrial. Under Presidential executive order, should the need arise, DEPA has five major functions to perform:

- (1) Develop a plan of emergency application of priorities and allocations of power.
- (2) Periodically assemble, develop as appropriate, and evaluate power requirements.
- (3) Periodically assess the power supply in order to estimate power available in an emergency and to weigh these estimates against calculated requirements so as to identify problem areas.
- (4) Provide the industry with protection guidance material adapted to its needs, and promote a national program of disaster preparedness and control to minimize the effects of an emergency.
- (5) Maintain continuity of production and capacity to serve essential users.

DEPA also provides guidance in organizing and training facility personnel, designing personnel shelters, evacuation plans, records protection, continuity of management, emergency repair, dispersal of facilities, and mutual aid associations for emergency.

In the continental United States, DEPA has established 16 power areas. Three more areas include Alaska, Hawaii and the Puerto Rico-Virgin Islands territory. Each area has a director, a deputy director and an alternate. They serve on a voluntary basis.

The area director is responsible for developing a standby organization, capable of effective performance in the event of an emergency. This responsibility involves two aspects: organization and preparedness.

Under the first, the director maintains liaison with every utility in the area, with the local and state civil defense organizations, and with the Office of Civil and Defense Mobilization regional offices.

Preparedness programs for the utilities in each area include such items as: communications, plant protection, continuity of management, preservation of records, radiological defense, and personnel morale and safety.

All of DEPA's plans and responsibilities are spelled out in detail in its publication "Electric Power gency Operations Handbook." This 114-page booklet contains current mobilization plans for electric utilities. It lists all area offices, addresses and telephone numbers. It tells participating utilities how they can take part in the annual civil defense "alert" exercises and lists methods of cooperation with civil defense and other preparatory agencies. Copies of the handbook may be requested from Defense Electric Power Administration, U. S. Department of the Interior, Washington 25. D. C.

Another publication, "Protection of Electric Power Systems," is of special interest to power-type borrowers, and has been mailed to them.

The success of DEPA's efforts depend directly on how widely the entire electric industry cooperates.

Survival in the atomic age calls for equal measures of common sense and specialized knowledge. One of the important defenses against widespread destruction from nuclear weapons is a well informed population; REA borrowers are well situated and well equipped to help inform the rural population about protection and survival.

Working with county Civil Defense organizations, the officers, directors, and managers of rural electric and telephone systems can play a major role in preparing against the eventuality of a nuclear attack.

REA is mailing to each borrower a copy of Agricultural Handbook No. 234, Protection of Food and Agriculture against Nuclear Attack. This is a guide for rural leaders prepared by the U. S. Department of Agriculture. Additional copies can be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 30 cents each.

Publications and films which REA borrowers may obtain for their consumers and subscribers include:

Defense against Radioactive Fallout on the Farm, Farmers' Bulletin 2107, U. S. Department of Agriculture, Washington 25, D. C.

The Family Fallout Shelter, Office of Civil Defense publication MP-15, available from the Office of Civil Defense, Battle Creek, Michigan.

Rural Fire Defense, Forest Service PA-517, U. S. Department of Agriculture, Washington 25, D. C.

Family Food Stockpile for Survival, Home and Garden Bulletin No. 77, U. S. Department of Agriculture, Washington 25, D. C.

Fallout and Agriculture, color film with sound, 16 mm; time, 23 minutes. Prints available from the Motion Picture Service, Office of Information, U. S. Department of Agriculture, Washington 25, D. C., and film service librarians of all State colleges of agriculture.

Lights for Christmas

by Richard Pence, Editor, The Carolina Farmer

"I hope I never have to use these again," she said softly, nudging a cardboard carton with her foot.

Inside the box was an array of oil lamps, newly packed away for storage. It represented another paragraph in the narrative called, "The Magic of Area Coverage."

The story began shortly after John F. Kennedy was elected President. At that time Mrs. Solomon Franks, who lives in the extreme northeast section of Jones County, North Carolina, decided to do something about getting electricity.

Her method? A letter to the newly elected President pointing out that her family and three neighbors had been unsuccessful in attempts at bringing power to her remote section.

The letter brought action. It was referred by the White House to the Rural Electrification Administration. The REA, after checking maps to determine the nearest borrower, wrote Jones-Onslow EMC at Jacksonville.

Fred Harman, Jones-Onslow manager, picked up the ball from there. He wrote REA that the Franks' home was considered outside Jones-Onslow territory, but he would check with another, nearer supplier to see if it would serve the Franks.

The other supplier declined to serve the families, so Jones-Onslow started the difficult, involved task of obtaining right-of-way over the $3\frac{1}{2}$ mile route to the Franks' home.

The line had to pass through remote forest lands owned by the Halifax Paper Company, the International Paper Company and the U. S. Forest Service.

Negotiations continued until the fall of 1961, by which time the project had

become the pet project of office and line personnel of Jones-Onslow. They set out to make electricity their Christmas present to the Franks and their neighbors.

The clearing of the forest lands and erecting of poles and wire moved forward briskly, pushed by the desire to make the Christmas deadline.

On December 10 Jones-Onslow officials and workmen gathered at the Franks' home to welcome their newest members, Mrs. Franks and her husband, Solomon.

And on that day the Franks family had its first lighted Christmas tree, courtesy of Jones-Onslow personnel, who brought the tree and decorated it.

Smiles were prominent that day. Mrs. Franks smiled as she flipped a switch that brought light into her living room. A Jones-Onslow serviceman smiled as he put the finishing touches on the gay tree. A member of the Jones-Onslow board of directors smiled as he looked back at the row of new poles with their shiny, taut wires. A lineman smiled as he tacked a number on the last pole.

"It was an expensive proposition," said Manager Harman, "and one that's not going to pay for itself for a long time. But it was worth every bit of effort and money." He too smiled, perhaps most of all.

As the small crowd began drifting away from in front of the Franks' home, a service man told the Franks to call if they had any trouble.

Said Mrs. Franks: "Even if the lights would never work again, having them just last night was wonderful enough."

So ends the story ... a story of democracy and electricity, all bound together in a Christmas bow.



350,000 RURAL PEOPLE REMAIN WITHOUT CENTRAL STATION SERVICE

by David H. Askegaard, Chief, Program Analysis Branch, REA

According to new REA figures, 97.6 percent of U. S. farms were enjoying the benefits of central station electric service as of June 30, 1962. This compares with 96.8 percent as of June 30 the previous year.

Put in another way, the new figure indicates that 91,350 farms, on which some 350,000 people reside, are still without central station electricity.

A comparison of the number of farms unserved this year with last year's figures does not show the number of new connections actually made since the current figures are based on new estimates of the number of farms and reflect new data on farmer-owned light plants. The 1950 Agriculture Census showed that a substantial number of farmers in certain States had electric service which was not central station service. Allowance was made for a gradual reduction annually, but a sample survey conducted this year by USDA's Statistical Reporting Service showed that farmer-owned plants have disappeared at a faster rate than expected. Practically all farmers who now have electricity obtain it from a central station source. This restudy accounts for more than half of the national increase in central station service reported this year.

The conclusion might be drawn that there are virtually no unserved farmers left, and that the sole task remaining for electric cooperatives is to meet the needs of their present members for ever-increasing amounts of power. There has indeed been a shift in emphasis, but the fact remains that REA borrowers continue to add well over 100,000 additional consumers to their lines every year. Some of these are farmers, but more are people who work in nearby towns or who have other reasons for living in rural areas. Some, of course, are included in the diminishing percentage of those who are obtaining central station service for the first time.

It is clearly impossible to reduce the figure of 91,350 unserved farms to zero. Some farms are simply too far away to make it economically possible for any power supplier, cooperative or not, to serve; and some people simply do not want electricity under any conditions. At the same time, we do not believe that only this hard core is left. The area coverage principle which REA borrowers made famous was largely responsible for increasing the percentage of electrified farms from 10.9 in 1934 to 97.6 in 1962. Vigorous application of this principle can bring electric service to many more farms. The new figures should encourage such action, since the number of unserved farms in the territory of any single cooperative is likely to be few; and the good financial condition of most cooperatives makes it feasible.

Farms Receiving Central Station Electric Service as of June 30, 1962

| State I | Number of Farms* | Percentage** | | | |
|--------------------------------------------------------------------------------------------------------|------------------|--------------|----------------|---------|------|
| Alabama | 111,800 | 97.2 | Montana | 30,000 | 94.9 |
| Alaska | 350 | 87.5 | Nebraska | 87,300 | 97.0 |
| Arizona | 7,600 | 96.2 | Nevada | 2,100 | 84.0 |
| Arkansas | 92,700 | 97.6 | New Hampshire | 6,500 | 98.5 |
| California | 102,550 | 98.6 | New Jersey | 15,100 | 99.3 |
| Colorado | 34,750 | 96.5 | New Mexico | 15,500 | 89.1 |
| Connecticu | t 8.800 | 98.9 | New York | 82,650 | 98.4 |
| Delaware | 5,300 | 96.5 | North Carolina | 200,900 | 98.0 |
| Florida | 47,300 | 98.5 | North Dakota | 52,800 | 96.0 |
| Georgia | 103,400 | 98.5 | Ohio | 141,100 | 98.0 |
| Hawaii | 5,800 | 85.3 | Oklahoma | 95,050 | 96.0 |
| Idaho | 35,800 | 97.3 | Oregon | 45,550 | 98.0 |
| Illinois | 152,700 | 98.5 | Pennsylvania | 99,200 | 98.2 |
| Indiana | 129,350 | 99.5 | Rhode Island | 1,450 | 97.5 |
| Iowa | 178,650 | 98.7 | South Carolina | 78,150 | 96.5 |
| Kansas | 102,700 | 96.0 | South Dakota | 55,000 | 96.0 |
| Kentucky | 152,050 | 98.1 | Tennessee | 160,700 | 98.0 |
| Louisiana | 76,000 | 98.7 | Texas | 223.200 | 96.2 |
| Maine | 17,650 | 95.9 | Utah | 17,850 | 98.1 |
| Maryland | 25,850 | 97.9 | Vermont | 12,600 | 98.4 |
| Massachuse | | 98.8 | Virginia | 97,500 | 97.5 |
| Michigan | 112,850 | 99.0 | Washington | 54,450 | 99.0 |
| Minnesota | 152,150 | 98.8 | West Virginia | 41,600 | 94.5 |
| Mississippi | | 95.0 | Wisconsin | 133,950 | 98.5 |
| Missouri | 171,500 | 98.0 | Wyoming | 9,600 | 94.1 |
| *Based on number of farms in 1961 esti- Total U. S. 3,726,850 97.6 mated by Department of Agriculture. | | | | | |

^{**}REA estimate.

Two-Thirds of All Farms Now Have Dial Telephone Service

Two of every every three farms in the United States now have modern dial telephone service.

An annual government survey shows that there were 3.6 million farms in July 1962, of which 2.7 million had telephone service. Of these, 2.4 million had dial service. The latter figure had increased seven percent over the previous 12 months.

Dial-type telephones were servicing 89 percent of the 2.7 million U. S. farms having telephones, compared with 84 percent in July 1961, and 45 percent in 1954—the first year this information was gathered for the survey.

REA estimates that about one-fourth of all farms with telephone service receive it from REA-financed systems.

Also included in the report are significant figures on cost of telephone service in rural areas. The local telephone bill paid by farmers in the United States averaged \$4.67 in July 1962 — only 12 cents higher than in July a year ago. It was the smallest annual increase since the 1953-54 period when the average amount paid by farmers for local telephone service went up nine cents.

As of July 1, 1962, REA had approved a total of \$909 million in loans to 576 commercial companies and to 214 cooperatives. These loans will finance telephone facilities, including 442,000 miles of line, to provide new or improved telephone service to almost 1.8 million rural subscribers in 46 States.



EDUCATE YOUR MEMBERS THROUGH STATEWIDE PUBLICATIONS

by DAVID E. BRYANT

The author is editor of Iowa Rural Electric News, and president of Rural Electric Consumer Publications, association of 27 statewide publications.

Back in the 1940's a rural electric cooperative could win the loyal support of its members simply by providing good electric service at reasonable cost.

But now a new generation which takes these advantages for granted has joined us—a generation which asks: what about today? Why cooperative rural electrification? And how much truth is there in the propaganda of commercial power companies?

Without logical and factual answers, this generation provides a fertile field for seeds of misinformation and suspicion sown by opponents of electric cooperatives. And the harvest? Member apathy, if not eventual hostility—even sell-outs.

Nevertheless, many cooperatives are still failing to make use of a basic member education tool—the statewide publication—the lowest cost, most effective means of communicating with members yet devised.

Of 5 million consumers receiving electric service from REA-financed systems, only half are on the mailing list of a statewide publication.

In the 29 States served by these publications, about 1.2 million consumers

do not see a statewide publication. There is no logical defense for such neglect.

Nor is there reason for the absence of statewide publications in most of the other 17 States. It's possible to produce a good statewide publication at reasonable cost with only 60,000 circulation. (Some are doing it with less circulation.) States with fewer than that number of consumers might join forces with other States to publish a two- or three-state publication. This is being done in Washington, Oregon and Idaho.

At what cost? Fve or six cents per members per month in most States—less in some others.

Worth the money? Unquestionably so. Dozens of manufacturers and distributors testify to the effectiveness of statewide publications in selling electric equipment and appliances. And they back their testimony by purchasing more than \$500,000 worth of advertising space annually.

The statewide publication is not a substitute for other member education activities. Rather, it supplements the co-op newsletter, local meetings, youth projects, advertising programs.

Neither is there any substitute for the statewide publication. Without it, a cooperative's member education program is incomplete—like an annual meeting program without a public address system.

OHIO ELECTRIC COOPERATIVES SPONSOR EQUIPMENT FIELD DAY

What's new in construction and maintenance equipment that will cut costs and provide better service?

Personnel from five states — over 500 in number — recently found out by attending a two-day equipment field demonstration held near Utica, Ohio.

They represented 26 Ohio electric cooperatives, and cooperatives and utilities in Ohio, Indiana, Michigan, Kentucky and Pennsylvania. A large field near the headquarters building of Licking Rural Electrification, Inc., was used as the demonstration area. Two separate power lines were constructed on it to enable diggers, derricks, power saws, brush chippers, transformers, insulators, boring machines, aerial basket trucks, and other products of 48 different manufacturers go through their paces.

One highlight was a demonstration of pole lifting and setting, and of aerial spraying, by helicopter. Luncheon was furnished in the assembly room of the cooperative by the ladies' auxiliary of a local church.

The idea for the equipment field day came from the program committee of the Line Supervisory Association of Ohio Rural Electric Cooperatives. Raymond Sanders, Pioneer REC, is president this year of the Association.

Indispensable help was provided by Dillon Dunlap, manager of Licking RE, who provided the area, facilities and detailed supervision.

Can other cooperatives hold similar events? There seems to be no reason why they can't.



A few of the 500 operations personnel who attended the field day held near the new office facility of Licking Rural Electrification, Inc., south of Utica.

GEORGIA COMMUNITY STARTS GARMENT FACTORY



Russell A. O'Neal, Carroll manager.

In many communities citizens have formed "development corporations" which offer land, buildings, and other inducements to encourage private industry to settle in their area. The people of Smithfield, in rural Georgia, have gone much further. Their development corporation has established and operates a garment manufacturing plant.

Smithfield people are a proud and independent lot. Some 25 years ago, when they needed a school, they got together and used their own labor and material to build one—a solid, two story stone structure. It was the "school house" for 300 children for many years, but in September 1961 Smithfield children began to attend a consolidated, larger school in nearby Bowdon. Then the school building became the community center.

Meanwhile, Smithfield citizens were becoming increasingly concerned with the number of unemployed people in the area—people who wanted to work

but who also wanted to remain in an area where work was running short. The Smithfield Civic Club knew that many of them were skilled or semiskilled and all could be trained; the question was, for what?

The Club emerged with this answer. It proposed to convert the school into a garment factory. It was well-equipped for this purpose, having water, sewage facilities, heat—and power from the Carroll Electric Membership Corporation, Carrollton, Georgia.

As the next step, the Smithfield Development Corporation was incorporated and authorized under the laws of Georgia to manufacture clothing for men, women and children. It issued 5,000 shares of common stock with an established \$10 par value per share; after 4,000 shares were sold to the people in the community, steps were taken to increase the stock value from \$50,000 to \$200,000.

Skip Yow, Carroll power use advisor.



The Development Corporation took over the former school building at a nominal rent. purchased and installed \$20,000 worth of modern machinery. hired as manager a man who had 28 years experience in the clothing business, and last July 1 started operations. The factory now employs 39 persons, expects to run the number employed up to 75 by next summer, and has produced 2,000 garments to date-all ordered and under contract before work was started. These garments are mostly all-weather coats; in November the plant switched to the production of summer sport coats.

Like any other business, the Corporation will have to take its chances. If it wins, it may have blazed a new trail for similar communities. If it loses . . . but community leaders are determined that it will not lose.

Carroll EMC is particularly committed to the success of the project. Its personnel have given steadfast assistance every step of the way. Manager Russell A. O'Neal helped organize both the Civic Club and the Development Association. With the assistance of power use advisor Skip Yow, he gave technical advice on proper wiring for the garment plant, checked the building for proper heating and lighting, and explained the project in many meetings to members of the community. Carroll Electric can supply without difficulty the 24,000 kwh required annually by the new plant.

O'Neal has been active in other civic groups as well. He is now chairman of the Rural Areas Development Committee and of the National Foundation for Carroll County.

The cooperative, a cautiously run but growing concern, celebrated its 25th anniversary in 1960. It has 1,937 miles of line serving 9,421 consumers. Eighty-five percent of them live on farms, and average 348 kwh per month. As might be expected, there is



A worker demonstrates use of fabric power cutter for benefit of officers of Smithfield Development Corporation.

a steady loss of services as marginal farmers move to other areas, but the cooperative continues to show gains. Though 375 meters were retired last year, services were run for 435 new consumers. Net gain: 60. Soon the cooperative expects to install six 100-amp regulators and to build its eighth substation.

Both consumer members and REA which loaned them \$3.7 million are benefitting from the cooperative's success. In 1956 the cooperative paid to members \$15,577.10 patronage credits accrued in the year 1948, and in 1957 cut rates by about \$47,000 a year. It has paid REA almost \$1 million on principal, almost \$600,000 in interest and made advance payments of \$167,556.

In the September 1962 issue of this publication, it should have been noted that all public power districts and rural electric membership associations in Nebraska, not merely Custer PUD, contributed financially toward the purchase and installation of the electrical heating system of the 4-H Camp near Halsey, Nebraska.



Agricultural Outlook for 1963... Income Up, Efficiency Up

Report from U. S. Agriculture Department

Realized net farm income in 1961 and 1962 was up more than \$1 billion from 1960, and this improved level likely will continue in 1963. Realized net income for this year is the highest since 1953.

Realized gross farm income reached a record high this year, but production expenses, which have risen steadily, also are record high.

Income of the farm population from nonfarm sources has accounted for more than a third of total personal income since 1955.

Net Income Per Farm \$110 over 1961

The net income per farm of \$3,470 estimated for 1962 is \$110 (or 3 percent) above 1961 and about 40 percent above 1955, the low of the last 10 years. The number of farms this year is about a fifth below the number in 1955 because of consolidations and farms taken out of agriculture.

The trend toward larger, more efficient-sized units has been important in increasing farm productivity and net income per farm.

Production Efficiency Unparalleled

Increased mechanization and wide adoption of improved practices have reduced the labor input in farming by one-third, while output per man-hour has doubled since 1950. Labor productivity has increased in both crop and livestock enterprises. However, the increase has been greater with crops because of a higher degree of mechanization. Also, crop yields have risen more than production per animal.

Farms Larger, Fewer, Cost More

Farms are getting fewer and larger. Using the 1959 Census definition of a farm, the total number of farms decreased by more than one-fourth between 1954 and 1959. The sharpest decline was in the number of small farms with less than \$2,500 of marketings. Farms with sales of \$10,000 and over increased by more than a third.

Larger farms and higher per-acre real estate prices have boosted capital investment per farm nearly threefold since 1950. More than three-fourths of the average farm investment is in land and service buildings. Machinery and livestock investments rose chiefly because of increased inventories, not higher prices.

12 RURAL LINES

In 1980, 245 Million or More People

The persistence of a relatively high birth rate, a low death rate, and a moderate amount of immigration have made it likely that the U. S. population will reach a level of 245 million or more persons by 1980. This would be 30 percent higher than the current level of 187.5 million.

In 1961, about 14.8 million people lived on farms in the United States. This is less than half the number of farm people counted in any year throughout the first 40 years of this century.

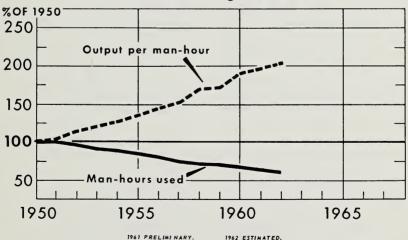
The productivity of farmers has become so great that farm people are now only 8 percent of the total population and 27 percent of the rural population. As farms get larger and technological changes continue, the number of farm people is expected to become even smaller. Preliminary indications are that the 1962 farm population is about 14.3 million.

More Rural People in Nonfarm Work

The urban fringes of metropolitan central cities grew by 80 percent from 1950-60, but a majority of metropolitan people still live in the central cities. Both the rural village and farm populations declined. These losses were offset by rapid growth of open-country nonfarm rural residents.

The number of rural residents working at nonfarm occupations generally increased in the 1950-60 decade. Rural residents employed at white collar and at service jobs increased by nearly 40 percent. In contrast, the number of people working at farm occupations declined by more than 40 percent. These trends will continue.

Farm Output Per Man-Hour Now Twice as High as in 1950



DECEMBER 1962 13

ATTENTION TO DETAILS PAYS BIG DIVIDENDS

The experience of two rural electric cooperatives with different operating problems demonstrates how constant attention to service details can be the watchword of successful management. One of these borrowers is in Iowa, the other in Minnesota.

The territory served by Maquoketa Valley Rural Electric Cooperative covers four counties and parts of five others in eastern Iowa.

Its 2700 miles of line run through 80 townships that dot a broad swath of land lying between Cedar Rapids and Dubuque.

Its headquarters are in the town of Anamosa, situated in the extreme southwest corner of its territory.

How, under these conditions, do you manage to patrol your lines? How do you manage to keep vehicles in contact with each other and with headquarters? How do you restore service speedily when outages occur?

Maquoketa Valley REC has come up with some answers:

First, you have enough vehicles — say, 15.

Second, you divide up your territory into five regions and put a twoman crew to live and work permanently in each region.

Third, you provide your headquarters and vehicles with the best possible communications system. The cooperative is spending \$40,000 to convert its communication system from carrier to radio. Soon a line crew will be able to answer calls without leaving the car. The new system will have the further advantage of operating on the same frequency as the vehicles of

seven other cooperatives so that direct communication between all cars will be possible in case of a storm or other emergency.

Take a look at the growth picture of Maquoketa Valley REC. Two years after its lines were energized in 1938, it had 1,500 consumers who averaged a monthly consumption of 65 kwh. By 1950 its consumers numbered 6,500 averaging 300 kwh per month. The latest figures show 7,877 consumers, using 700 kwh per month. Mileage was increased from 750 miles of line in 1940 to 2,685 miles today.

Look at its "sales promotion" policy. Located in a stable agricultural area where 90 percent of its consumers are farmers, the cooperative indulges in no high-pressure sales tactics. At the same time, among its 53 employees it numbers a power use advisor and a home economist; the latter averages two meetings a week in private homes (minimum 18 guests) where she demonstrates the proper use of lighting, electric cookery and the advantages of electric home heating. The hostess receives, in return for the use of her home, either an electric hair dryer or an electric space heater.

Phases of "motivational research" are not neglected. A recent questionnaire to consumers indicated that 69 percent of the area's population had pressure water systems, 67 percent had freezers, 56 percent had electric water heaters, 41 percent had electric ranges, 30 percent had heat lamps, 26 percent had elevators and tank heaters — all of them showing marked increases from the 1955 figures. Coming up



This muskeg tractor, combined with chemical tanks and airblast spraying equipment, clears brush in the swamps and marshes that form so much of the territory served by North Itasca Electric Cooperative in Minnesota.

fast are silo unloaders, bulk milk coolers, welders, electric clothes dryers and air conditioners.

The cooperative is keenly conscious of the need for good member relations and for more understanding even among those it does not serve — and is willing to spend money to improve these conditions. It issues a monthly newsletter (yearly cost \$2,500), advertises regularly in all area weeklies (about \$2,700 a year), shares a radio program with seven other cooperatives who are served by the Central Iowa Power Cooperative (\$4,000 a year), and sees to it that its consumers receive copies of the publication of its Statewide association.

The publicity program pays off—as witness the fact that at its 25th annual meeting, some 2,200 people attended, 500 more than the previous year. It was an all-day meeting, with a free sack lunch provided, and \$1,200 worth of door prizes.

As for prudent management, the cooperative has reduced its \$5 million loan from REA to less than \$1 million, and has recently paid its first patronage credits — \$137,000 in cash to almost 4,000 members who had received service between 1942 and 1945.

At Bigfork, Minnesota, the handsome new headquarters building of the North Itasca Electric Cooperative is the outstanding business structure in the town and for many miles around.

This modern brick, glass, and cement stucco building, with 4,000 square feet of floor space, affords excellent office facilities, an effective demonstration area, a spacious community room, and a large fireproof vault for co-op records. Storage and garage facilities are located in a remodeled structure attached to the rear of the new building. Formerly combination office and warehouse, this structure was the co-operative's first "boughten" home. It provides an additional 3,000 square feet of space.

The interior of North Itasca's new building is attractive, and planned to promote staff efficiency and comfort. Much of the wall space is glass, the floors are of terrazzo, the ceilings of acoustical plaster. Both fluorescent and incandescent fixtures are used for lighting. Electric heating, with forced air ventilation, completes this all-electric installation.

The building symbolizes the fact that, to use an old-time country expression, North Itasca has come "a fur piece" since its first REA loan in 1941. It started as a self-help project, with members doing much of the work. Almost immediately it ran into wartime shortages of materials, and not until November 1945 were the cooperative's lines energized.

The nature of the area, with its marshes, almost no towns, small farms, and a large seasonal population does not permit grandiose planning. Rather, it encourages improvisation, flexible response to needs as they arise, vigorous promotion of electric appliances, and diligence on the part of manager Hubert Evensen, the board of directors, and all 13 members of the cooperative's staff. These methods have paid off.



Mrs. Helen Dutcher, billing clerk, displays a few of the patronage credit checks mailed last summer to Maquoketa Valley REC consumers. A total of \$137,295 was paid for consumer credits accrued from 1942 through 1945.

Itasca County is ruggedly beautiful, with thick forests and many lovely lakes. Hundreds of summer cottages border the shores of those lakes, and most of them are connected to co-op lines. For years most of the summer visitors have stayed for only a few weeks, and consumed a comparatively small amount of power. In 1951, for example, the monthly average was only 107 kwh for all co-op consumers. By 1961, however, it had gone up to 262 kwh a month—more than double the 1951 figure—as a result of effective power use promotion.

An outdoor lighting program started recently by the cooperative is meeting with success. The co-op installs, maintains, and furnishes power for a security light for a flat charge of \$2.50 a month. Its mercury vapor lamp equals a 500 watt bulb in brightness. The light is controlled by an electric eye that turns the light on at dusk and off at dawn.

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The first big project undertaken after Evensen became manager in 1956 was right-of-way clearing. Much of the system's territory is swamp and marshland, where brush grows head-high in a year if it is left uncontrolled. Long outages had been frequent, consumer complaints had been bitter. Working with his crew, Evensen developed a curious looking but highly efficient chemical spraying machine to help maintain brush control. It is a muskeg tractor, combined with chemical tanks and airblast spraying equipment, and it easily negotiates swamps, marshes and even areas completely covered by water. Protected by a transparent hood over the seat, the driver controls the sprayer, altering its direction as desired.

On another front, serious problems of service and maintenance had developed in Northome, a small community served by the cooperative, but located 35 miles from Bigfork. To correct this situation, the co-op decided to build a branch office there. The structure includes garage space for a maintenance truck. The installation is in charge of a co-op employee who lives next door and thus is on call for service in the area.

Manager Evensen also serves as secretary of the North Itasca Development Association, whose purpose is to improve the economic condition of the area.

The economics of Itasca County has for years been based on iron mining, lumbering, and farming. Many of the iron mines have closed in recent years, however, and timber now is its backbone. The Development Association decided that the best prospects lay in promoting increased lumbering and the manufacture of wood products in the cooperative's service area, where

electricity is available.

Results have been heartening. A sawmill and lumber yard has opened for business in nearby Marcell. In Northome, a fence plant has a \$50,000 factory under construction. The Northome Industrial Committee convinced another company considering expansion to settle near the town where a completely electrified lumber plant is being built. The co-op furnished the necessary power line, and county authorities built a road to the site.

Near Bigfork, an all-electric plan producing popular stockade-type patio fences has opened. Last summer it employed 16 men, but actually benefited some 30 families in the area by opening up new jobs in timber-cutting to supply the cedar and spruce logs needed for fence manufacture.

Each year Maquoketa Valley REC sends four writers of prize-winning essays on an educational trip to Washington, D. C. In 1962 one of the four youngsters was Cheryl Flaucher. Congratulating her are Manager George T. Hall, left, and G. J. Armstrong, president of the co-op since 1957.



Notes on New and Revised REA Bulletins

New Bulletins:

345-24 (9/7/62), "REA Specification for Spindle-Threaded Steel Communication Insulator Pins and Associated Plastic Bushings." Describes REA minimum requirements for these items.

Revised Bulletins:

40-2, 340-5 (8/16/62), "Insurance Coverage for Borrowers' Contractors, Engineers and Architects, and Bond Requirements for Borrowers' Contractors." States current REA policy with respect to minimum insurance requirements for borrowers' architects, engineers, and contractors.

81-4, 381-6 (8/16/62), "Payment to Contractors for Materials Delivered." Provides for a revision of REA Form 800, Construction Contract, Amendment for Payment, to specify the responsibility of the contractor for loss of materials. 114-2, 414-1 (8/16/62), "Minimum Insurance and Fidelity Coverages for Electric and Telephone Borrowers." States current REA policy with respect to minimum insurance and fidelity coverage requirements for REA electric and telephone borrowers.

115-1 (8/28/62), "Sales of Property by Electric Borrowers." Increases from \$2,000 to \$5,000 the minimum sale of property requiring specific REA approval, and permits the borrower to designate the loan note to which proceeds from sales are to be applied.

180-3 (August 1962), "ABC's of Accounting and Interpretation of Financial Statements." Brings bulletin into agreement with the revised Uniform System of Accounts and the Monthly Financial and Statistical Report, REA Form 7. 109-2, 409-3 (9/5/62), "Labor Relations." States current REA policy with respect to labor relations activities of borrowers.

345-6 (9/7/62), "REA Standard for Splicing and Terminating Plastic-Insulated, Plastic-Jacketed Cables Used on Telephone Systems of REA Borrowers." Reflects use of new materials in connection with splicing plastic-insulated cables, and includes details on splicing figure 8 type cables.

345-18 (9/7/62), "REA Specification for Plastic-Insulated, Plastic-Jacketed Station Wire." Reflects changes in REA minimum specifications with respect to the electrical requirements, and establishes a standard of color under Munsell Notations for plastic-insulated, plastic-jacketed station wire.

345-16 (9/10/62), "REA Specification for Reinforced Heavy Duty Point Type Transposition Brackets." Reflects changes in REA minimum specifications with respect to strength and dimension of reinforced heavy duty point type transposition brackets.

6-1, 306-1 (9/21/62), "System for Classifying and Issuing Policies, Procedures, and Other Published Material." Describes current procedures for issuing REA publications, and establishes a subject matter outline for Rural Areas Development.

322-1 (September 1962), "Area Coverage Survey." Reflects an increased emphasis on the area coverage principle in the Telephone Program.

RURAL LINES

COOPERATIVES MEAN BUSINESS IN WESTBY

One of the strongest impulses in Westby, in west Wisconsin, is the urge to do things the cooperative way.

Aside from Madison, the boast goes, no place in Wisconsin has more cooperatives. They do an annual business of more than \$6 million and have payrolls of \$1½ million. That's big business in this Vernon County community of 1,544 persons.

There are many reasons why Westby is a strong cooperative town. Undoubtedly, it has something to do with the Norwegian descent of most of the residents. It probably has something to do with the good black soil of Vernon County, which enables relatively small, family-owned farms to prosper (dairy products, binder tobacco for cigars, corn, oats, and hay are the principal crops).

It has to do with the aid and guidance given by REA and other Agriculture Department agencies. But one factor that should not be ignored is the assistance that the cooperatives give each other.

It is exhibited most clearly in the assistance that the Vernon Electric Cooperative has given to the Vernon Telephone Cooperative.

Like most REA borrowers, Vernon Electric had rough sledding during its early years. But, with REA assistance and excellent management, it has prospered. Today it serves almost 5,000 members in 32 townships, who use an average per month of 595 kwh for a variety of purposes: freezers, elevators, hay driers, barn cleaners, milk coolers, ranges, refrigerators, television sets, pressure water systems, milk machines, electric water heaters, chicken and pig heat lamps. It dedicated a

\$250.000 headquarters building in December 1957, and a recent annual meeting was attended by 2,200 persons. Its auditorium is a center for all kinds of youth and farm groups.

Other indices are equally good. Of the \$3,252,000 it has borrowed from REA, the cooperative has paid \$854,-596 on principal, and \$167,656 in advance. It has assigned capital credits amounting to \$806,578.

The cooperative, under the managership, first, of H. F. ("Lefty") Leifer, and now of Earl P. Jaeger, who was office manager for some 37 years, is still alert and progressive. Three years ago it put in a system of advance billing which may be unique in the Nation. The system is described as follows.

On July 1 of each year, the consumer is notified what his probable power cost will be for the next 12 months. He has the option of paying this bill in one annual payment or of paying by the month in 12 equal installments. If he chooses the latter, he receives an installment book in July, containing an original and duplicate statement for each month from August through July of the following year. The amount due each month is indicated on each statement and on a duplicate form that may be used as a check. By writing in, in the appropriate place, the name of the bank in which he has his checking account, the consumer can sign all the predated checks when he receives the book. He then mails or delivers all the checks to the cooperative office which deposits them successively on the 17th of each month. The consumer's cancelled check is his receipt.



Meter readings are made by the consumer in October, February and June. On July 1 the actual kwh consumption is computed, and the account adjusted. Almost one-fourth of the cooperative's 4,800 consumers now use this system. Commercial consumers and three-phase power consumers are not eligible for this predated check service; they read their meters and pay each month.

With this system, consumers never have to worry about being delinquent; they save on penalties, postage, and trips. All they have to do is to see that there is enough on deposit in their checking accounts to cover their checks.

By 1950, when it was apparent that the electric cooperative was over the hump, its principal officers—manager Leifer, attorney Floyd Wheeler, president H. O. Melby, and others—decided that cooperation, together with the assistance made possible under new provisions of the REA Act, was the only way in which telephone service in the area could be improved and extended. On March 15, 1950 they held the first

of a series of meetings, which led to the incorporation of a telephone cooperative based on the merger of several "roadside" companies. However, REA had doubts about the economic feasibility of the project until the cooperative laid down plans to purchase from the LaCrosse Telephone Company its Desoto and Genoa exchanges. It was not until May 1954 that a loan of \$525,000 was granted. The following year another \$101,000 loan was approved.

Now developments followed swiftly. In February 1956 the first annual meeting was held in Viroqua, with three directors being elected from each of the existing exchanges—Liberty Pole, Redmound and Romance. In August 1956 the DeSoto-Genoa exchanges (550 subscribers) were taken over, the first lineman and bookkeeper were hired, and the first truck purchased. In July 1957 the cooperative cut over to dial. In March 1958 the LaFarge Telephone Company (596) subscribers) was purchased and a third loan was requested from REA to convert the former stock company to dial.

20 RURAL LINES

The close connections between the two cooperatives were apparent at an annual meeting held in November 1958 when all telephone officers elected were also electric cooperative officers.

The purchase of the Viola and Readstown Exchanges (482 subscribers) from the LaCrosse Telephone Company followed.

In December 1961, stockholders of the 59-year-old Westby Telephone Company (1,045 subscribers) voted to dissolve their corporation and merge with the Vernon Telephone Cooperative. Westby's common battery and magneto system is now being converted to dial at a cost of \$276,000. A new central building will be built in Westby to connect all seven exchanges. By May 1963, 216 miles of new line will have been buried, and the all-dial system will serve 3,600 subscribers. The total amount borrowed from REA amounts now to \$2 million.

The untimely death in an automobile accident of Leifer and Melby was a shattering blow to both cooperatives, but present working relationships with the contractors are being skillfully handled by a capable Board; by R. W. ("Rollie") Little, a veteran of 25 years of service with a large private telephone company before he came to Westby in 1960; and by Anthony Curti, president of the telephone cooperative since 1958. mixed Italian and German descent. Curti takes placidly his position as a leader of a largely Norwegian community, but there is nothing lukewarm about his devotion to cooperation. He is active not only in the telephone and electric cooperatives but also in the Viroqua Cooperative Creamery, the Northern Wisconsin Tobacco Pool and the Tri-State Breeders Cooperative. He considers it only fit, proper and natural that a telephone cooperative should be able to merge almost all the roadside and stock companies in the area.



Headquarters building of Vernon Electric Cooperative in Westby, Wisconsin.

Group Instruction Aids Correspondence Students

Anyone who works for an REA telephone borrower and takes the correspondence courses in accounting given by the Department of Agriculture's Graduate School (described in the May 1962 issue of this publication) is wise.

If he happens to work for an Illinois borrower, he's lucky as well. Because then he can attend a class given near him and receive help and encouragement on his lessons. Under the sponsorship of the Illinois REA Telephone Borrowers Association, arrangements have been worked out whereby group meetings are held each month for bookkeepers, accountants and others who have enrolled in the REA Borrowers Accounting (Telephone) Course.

Under the Illinois plan, the borrowers' association urges its member companies and cooperatives to enroll personnel in the correspondence course and to provide meeting places for them at centrally located points. REA provides an accountant as the instructor at each meeting. The Graduate School is delighted that the students receive personal instruction.

At these training meetings, four in number, each group meets with REA field accountant Miss Jessie D. Armbruster. Together they go over the lessons and discuss the various records and procedures outlined in the course. After the meetings, students work out the problems and submit their solutions to the Graduate School for grading in the usual manner. At subsequent meetings the graded lessons are reviewed with Miss Armbruster and questions answered.

So far, four meetings of each group have been held and all reports seem to indicate this pilot training program has been an unqualified success. Of the 24 enrollees, there have been no drop outs. At some of the meetings, managers, office managers and others not enrolled in the course have attended; they report that these discussions are interesting and worthwhile.

Part of the success of this program can doubtless be attributed to Miss Armbuster, the only woman accountant on the REA field staff. Miss Armbruster, who came to REA in 1943 after some years of experience with various business concerns, has a natural gift for teaching. Back in 1956 she devised an instruction manual for telephone borrowers and has been granted two awards by REA for "sustained outstanding performance."

Miss Armbruster explains knotty problems, amplifies different phases of each subject, and takes a personal interest in seeing that the students complete their lessons and submit their solutions to Washington on time.

The groups meet once a month—at Effingham, Marion, Rantoul and Colchester. The first group met May 14, 1962. Average number in attendance is eight. Students hold positions of manager, bookkeeper, assistant bookkeeper, secretary, office manager—and president-manager.

Both commercial companies and cooperatives are represented. In this connection Miss Armbruster reports: "Where the class is made up of students from commercial companies only, the discussions were definitely different from those classes where both commercial companies and cooperatives were represented. I found commercial company employees extremely interested in the procedures applicable to cooperatives." Some meetings are held in hotels, others in the offices of a borrower. Occasionally, there are "treats." At one borrower's office, coffee and doughnuts are served before the session begins in the morning. However, these are definitely work meetings and socialization is limited to coffee breaks and lunch hours.

One byproduct of the meetings is an exchange of information among borrowers' personnel. Sometimes one student has worked out a good answer to a common problem; it is promptly adopted by the others. On occasion, a borrower which has been contemplating changing to a new procedure gets the benefit of the experience of another borrower which has already made the change. Another advantage is that it gives each borrower's representatives a chance to consult with Miss Armbruster on individual accounting problems at least once a month. She is available for consultations long after "school" has let out.

Adoption of this Illinois training program by other States is not entirely For one thing, geographfeasible. ical distances are often too great to make group meetings possible. For another, the work schedule of many REA accountants does not permit them to act as instructors. It must be remembered that the correspondence course is set up to do away with the need of live instructors. However, the Illinois plan can be considered a challenge to borrowers in other States to develop similar programs. In Oklahoma, for instance, an electrical cooperative has enrolled its office manager and all its clerical staff in the correspondence course. The office manager assists and encourages the others to complete their lessons.

President of the Illinois borrowers' association is Harold Harkness, manager of the Camp Point Telephone Cooperative. Secretary is Carl Nye, manager of the Palestine Telephone Company.

THIS MONTH

- 3 How Systems Can Prepare for National Emergency
- 5 Lights for Christmas
- 6 350,000 Rural People Remain without Central Station Service
- 7 Two-Thirds of All Farms Now Have Dial Telephone Service
- 8 Educate Your Members through Statewide Publications
- 9 Ohio Electric Cooperatives Sponsor Equipment Field Day
- 10 Georgia Community Starts Garment Factory
- 12 Agricultural Outlook for 1963 . . . Income Up, Efficiency Up
- 14 Attention to Details Pays Big Dividends
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OFFICIAL BUSINESS

For Outstanding Service:



Two persons are alive and well today because a co-op lineman and ground-man remembered the safety lessons they had learned through the Jackson Electric Membership Corporation at Jefferson, Georgia.

It happened last August. Talmadge Carter and Berry Lavender, co-op employees, were working near Shady Grove Community, North Banks County, Georgia. Nearby, two Soil Conservation Service men were doing some surveying work. A storm came up and the SCS men were struck by lightning. They were badly burned about the waist, legs and feet. One was unconscious, and unable to breathe because of throat obstructions. His pulse was not noticeable.

The co-op men first summoned an ambulance, then cleared the throat of the more severely injured man, and applied closed chest heart message to revive him. Both victims were made as comfortable as possible. They received further treatment at the hospital and were later released.

Carter and Lavender learned their life-saving techniques at courses given by the Georgia Job Training and Safety Program, representing 4 REA-financed cooperatives in the State. Instructors are J. L. Langston and A. P. Cofer.

The Georgia Safety Committee has presented the two co-op men a Meritorious Achievement Award "in recognition of outstanding and courageous service to their fellow men." The citation stated that "the heroic actions by Carter and Lavender reflect great credit upon themselves, their organizations and their profession."

REA adds its congratulations to Jackson EMC and all those who are making the Georgia Job Training and Safety Program so successful.